Once we expect every student to meet the highest goals, the reasons weaken for separating classes into ability groups. But what else has to change when schools stop tracking? How can kids so various learn together, turning their differences to their best advantage?

BY KATHLEEN CUSHMAN

Essential Schools' 'Universal Goals': How Can Heterogeneous Grouping Help?

"I'M ALL FOR TRACKING," Theodore Sizer declares emphatically, and I know he's got to be kidding. On this most volatile and emotional issue in American secondary education, the chairman of the Coalition of Essential Schools surely does not equivocate. Heterogeneous grouping-mixing students of different ability levels in academic classes, instead of streaming them with like peers in tracks toward class-born and race-sorted futuresis central to the Coalition's vision, I always thought. Doesn't it fit right into those "universal goals for every student," that "personalized education" CES's Nine Common Principles call for? I wait for the other shoe to drop, but not for long. "Just give me as many tracks as there are kids," Sizer finishes with a grin.

Beneath his joke, though, is a dead serious challenge to the teachers, parents, students, and communities of Coalition member schools. A 1982 research analysis by lames and Chen-Li Kulik found no evidence that students learn more when grouped by ability; at lower skill levels, a 1986 study shows, students actually learn less. Teachers set higher goals, like critical thought and independent learning, for higher-track students, and focus more on discipline and conformity in lower-track classes, the nationwide Study of Schooling revealed. Legal challenges to tracking over the last 25 years have argued its segregative aspects: substantially higher percentages of African-American and Hispanic students are placed in lower-track courses, statistics show. Moreover, homogeneous grouping may deprive students at all levels of skills essential for their future success. If we want citizens who take an active and thoughtful part in our democracy, Sizer argues, they must get trained for this in school—working together on equally challenging problems, and using every possible talent toward their solutions.

Yet few educational issues raise so many hackles as heterogeneous grouping, especially in the secondary school. The most vocal opposition to mixed-ability classes typically comes from the parents and teachers of high-achieving students, who fear classes will become less challenging as they accommodate the learning needs of those less well prepared. But teachers at all levels worry about de-tracking. Getting students of different levels to work together well implies new teaching methods and sometimes entirely new curricula, they say-and that requires time, practice, and freedom from teacher evaluation procedures geared to the old ways.

Tracking itself takes different forms at different schools. Some systems keep kids on an unvarying path labeled "honors," "college prep," "general ed," or "special ed"; others group students by ability only in certain subjects like math and English. Others simply set up sequential courses by department, Getting students of different levels to work together well implies new teaching methods and sometimes entirely new curricula.

and limit who takes them so that a form of *de facto* tracking results. Who makes the decision about what courses a student takes also is key to a school's stance; many kids in lowtrack courses, encouraged by wellmeaning advisers, actually think they are taking college prep courses.

Whichever form of ability grouping a school has employed, the decision to de-track requires a rethinking so fundamental as to upset almost every apple cart in the place. Moreover, schools in the midst of change can find as many ways to mix students together as they once had ways to separate them. How can Essential schools stimulate the highest caliber work at every level, respecting the sequential nature of some areas of learning and yet generating a shared intellectual discourse among all students? In conversations with Essential school people at various stages of this process, a range of approaches emerges-ingenious, cautious, bold-that displays on yet another palette just how broad the Coalition's spectrum has become, and just how many challenges its schools face as they change.

New Structures Can Help

"If every child is to be taken as herself," Ted Sizer says, "teachers have to know where that kid's head and heart is---which implies a smaller student load per teacher. At the same time teachers will need the maximum authority to adjust class time, materials, and pedagogy so they can help her move ahead." When schools are small enough, he argues, and their structures simple enough, teachers can remain quite flexible in how they challenge individual students. "Schools could learn from the best athletic and drama coaches," he says, "how to plan and regroup from day to day, based on where the kids are and what they need to exercise their minds."

In practice, this often entails breaking a large high school into smaller "houses," and teaming teachers across disciplines to get their student loads down. At Boston English High School, for instance, the 400 students in the Multicultural Program represent "as diverse a mix as that of the whole school," says its director, Susan Fleming, Bilingual students in a host of languages study the same curriculum as "regular ed" students in classrooms next door to each other; they mingle for many program-wide activities; and, like all Boston English students, they are grouped across ability levels for history and science, but not math and English.

Team teaching can be a powerful structural tool for making heterogeneous grouping work. At Thayer Junior/Senior High School, a small public school in Winchester, New Hampshire, a team of three teachers works with each grade level mixing students of all achievement levels. The result is a deemphasis on the ladder of sequential courses most schools employ to sort and select their students. "Kids lose track of the sense that they're 'in class," comments Coalition researcher Joseph McDonald. "They're 'in team'--which means they can be productively at work in other parts of the building, on meaningful projects that aren't limited by time and space." This works best, he notes, in a small school like Thayer, where it's easier to keep track of kids' physical whereabouts.

Another structural choice simplifies the curriculum into a few broad areas of inquiry, abandoning the course as organizing unit and arranging intellectual endeavors around themes or projects that include a range of students. In a recent six-week unit at McCaskey High School in Lancaster, Pennsylvania, for example, 170 tenth-grade students and eight teachers took up the task of constructing a public defense (against invading aliens) for the continuation of life on Earth. They meet daily in an unstructured five-period block, integrating work in social studies, math, science, and communication arts.

"The raw material for the defense was produced by small groupssome ability-grouped, some notstudying specific content matter from those four subject areas," says Dan McGary, a curriculum supervisor for the district office. "Then mixed groups of students processed what came out of that, integrating it into the defense statement." Overall, McGary says, the school's goal is to give students a mix of experiencessome subject-oriented, others aimed at solving problems, but all organized around authentic intellectual experiences. "Certain activitiesworksheets or cookbook kinds of labs-have traditionally been associated with lower ability levels," he says. "We want to eliminate those unchallenging routines for all students."

Projects require a variety of skills, not just the narrow ones that traditionally define kids as gifted or slow.

Project-based curricula have the advantage of requiring a variety of skills from students, not just the narrow competencies (like verbal deftness or math acuity) that have traditionally defined children as gifted or slow. "I've found that a kid who's great in math is often not so good at interviewing, writing, or group skills," says Suzanne Valenza, who teaches cross-disciplinary courses at University Heights High School, a New York City alternative public school. "Working on a group project, he realizes that everything's connected—which helps him stop ignoring the areas he's less good at and get his act together." In that sense, she argues, separating kids by ability actually keeps the most able student from achieving to full capacity.

If schools decide to regard projects as the basic learning unit, however, they must design time and space into their structures to encourage such work. Art or music studios. labs, workshops, computer centers can all become places where kids can come in during free or scheduled time and work on a project over time. Harvard University professor Howard Gardner makes a strong argument for the educational worth of such projects in his 1989 book To Open Minds. Among other things, he suggests long-term apprenticeships that expand a student's learning options and nurture her idiosyncratic intelligence through some valued community activity. In China, Gardner notes, "students work on a day-to-day basis with acknowledged masters in a domain, and not only learn to hone their skills through regular drill in a meaningful context but also acquire sense of how to deploy knowledge outside formal schooling."

Age-grouping of students is another false convention, Ted Sizer asserts. "Schools set it up so that Susie goes in this track because she's 14 years old and can do X, Y, and Z," he says. "Ideally, we should continually reshuffle students of different ages into appropriate learning groups as they reach the level of skill required." Some elementary schools follow such a pattern under the Joplin Plan (better known in the 1960s than today), which groups children by reading levels into crossage classes mingling high with low achievers. (This goes far, its proponents assert, to thwart the sense of failure that often dogs lower abilityranked classes, a self-perpetuating cycle often linked to racial and class prejudice.) Another example comes

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from the Crefeld School, a private Essential school in Philadelphia where students ages 12 to 18 mingle freely in two ungraded groups, loosely organized as an upper school and a middle school.

The effects of eliminating agegrading are noticeable, Coalition staffers say, at Brown University's Summer High School. Besides bringing together students from public and private schools, rich and poor backgrounds, and many prior skill levels, the classes also mix all different ages, from eighth to eleventh graders. Somehow, observers say, this age diversity has an important influence on how readily the students accept the rest of the variations among them. Working within a narrow age band seems only to emphasize all other differences, to ill effect.

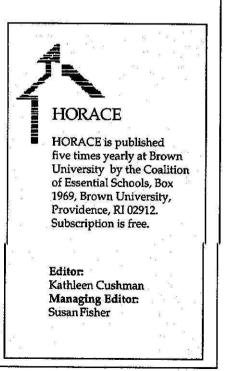
Strategies for Mixing Abilities

What teaching methods work best in mixed-ability classrooms? How can students of widely various skill levels encounter the same demanding materials, explore them to the limits of their abilities, and enrich each other's experience with the special talents each one brings to class? Particularly, how can the top ten percent of students, on whose behalf much of the fuss is raised, be pushed ahead instead of dragged down by the heterogeneous learning group?

One common solution is the classroom practice known as "cooperative learning," or "collaborative learning," which has enjoyed wide vogue in the last decade. In the Boston English "global issues" course Susan Fleming team-teaches with two other administrators, for example, 34 tenth to twelfth graders work in small groups on the same reading and writing assignments. More able kids will inspire and lead the slower ones, the cooperativelearning theory has it, and every student will contribute his or her own particular strength and flavor to the learning stew.

"We give them pretty challenging material," Fleming says. "They read it together, identifying the major points in each article; then they quiz each other on the content. Each kid will get one question to answer on the quiz, but the group is graded for its whole performance, so there's incentive to get everyone up to speed." Choosing complex and interesting topics like immigration, she says, ensures that even the most able students face real intellectual challenges. On the written position papers they complete each term, each may write at a different level, but all are facing the same task, "There's a lot of interdependency among the students," Fleming says. "It's not easy stuff, and everyone brings something to contribute."

Does coverage of content suffer when teachers emphasize group work like this? In an article published in Thayer High School's publication



"Here, Thayer, and Everywhere," tenth-grade math teacher Elizabeth Whitcomb has described her consternation at the thought of teaching geometry to those who might not be prepared for it, and her gradual "conversion" to a strong preference for mixed-ability classes, at least at that level.

Early intervention is critical when a student drops behind in a heterogeneous class.

"My goal was that all students would not only be reached, but also challenged, often beyond selfimposed limits," Whitcomb writes. "I also wanted them to know that true mathematics could be done at all levels." She combed source materials for problems that could be explored at several different mathematical levels-finding the shortest path between three points on a riverbank, for instance-and encouraged students to go as far with them as they could. "While some students may not have realized the wide range of applications at first," she writes, "they were able to appreciate and understand them once other students made the discoveries."

Whitcomb's students often work in twos and threes, with more advanced students coaching others in necessary concepts. On many assignments, she offers a more challenging version along with the basic problem; anyone can try it for extra credit, but there is no penalty if one doesn't. She also asks students to think through each week, in written journals, an "unsolvable" problem from their week's work, and to try to discern and analyze what made it hard. "As the year proceeded the journals provided the heterogeneous classroom with something very vital," Whitcomb writes, "an activity which everyone could do and from which everyone could gain according to his own level."

Such strategies are common in mixed-ability situations, and Whitcomb is among many Essential school teachers who say that students work harder and do better when they take part in them. Holly Perry, a Thomson Fellow and principal of Philadelphia's Academy for the Middle Years, a public middle school, describes what happened when her school decided to offer Algebra 1 to all eighth graders, including a special ed teacher as part of the teaching team. "One of our top algebra students right now is a special ed kid with a reading and math disability," she says. "I think it's really a matter of confidence. There are so many levels of hurt for youngsters who are set apart that it actually gets in the way of cognitive progress."

Early intervention when a student is dropping behind in a heterogeneous class is critical, teachers agree—which is one reason a small and flexible school structure is so important to its success. "When a student needs remediation, we work with the problem right there at the time," says Jo Stokes, a McCaskey math teacher with a heterogeneous Algebra 2 class. "We have a full advisory period daily to give students extra help, and we have college students come in from the local university to tutor kids."

Another key factor is support from other teachers—in planning lessons that can challenge all students, in identifying kids who need extra attention, and in cooperating so they can get it without delay. Many teachers who work successfully with mixed groups team up with special ed resource teachers or aides, student teachers, interns, or parent helpers. The key, say those who do it, is to make such help freely available to *all* kids in the class, so as to remove any stigma attached to special ed or extra help.

Finally, classroom management skills can make or break the mixedability class, Susan Fleming notes. "You can't change your teaching strategies unless you have your classroom management down," she says. "You have to be clear on what needs to be done, and there has to be some kind of accountability at the end of class—ten minutes or so to pull in and report back. It's a messy business, and it's not that easy. The people it works for the best seem to have their kids 'on task' all the time."

Seminars and Mixed Groups

Seminars provide another practical strategy for drawing students of different skill levels together in challenging classes. At Chicago's Sullivan High School, for instance, every student in the school participates in weekly seminars in English and history, monthly seminars in sciences, and occasional ones in subjects like math and languages. The entire faculty and staff have been trained to lead seminars, and periodically the whole school gathers for enrichment or special-topic seminars.

The practical effect, seminar advocates argue, is twofold. Students all read the same work—at Sullivan, a demanding mix of classics and contemporary authors—and so share in the same intellectual ground of ideas. And the excitement and controversy generated by those ideas provides the stimulus to go back and master the necessary skills to explore them further.

Some schools go to great lengths to make sure the actual text of, say, *Romeo and Juliet* is read by all ninth graders; others tailor the experience to skill levels by reading Charles and Mary Lamb's retelling, for instance, or by seeing the play in performance or on film. At Sullivan everyone reads the original text, but reading

Seminars organize a course's learning outcomes—reading, writing, analyzing without requiring that every student have the same skills. One school creates courses whose intellectual questions are common to a variety of sources at different levels.

tutors are available to work with students on difficult texts—a practice that, to work, requires the commitment of space and out-of-class time.

Seminar-style discussions often draw out the best from less advantaged students whose life experience can amplify their classmates' understanding of texts. "Kids with street smarts may be in some ways actually better prepared to deal with ambiguity, to make inferences, and to approach a subject from different points of view than are kids who have been trained in a 'right answer' mentality," says Ann Cook, who co-directs New York City's Urban Academy, a small public alternative school. "Just because you come from a middle-class environment doesn't mean vou're more analytical-you may just be more verbose!"

Some seminars draw a number of sources together to answer "essential questions" like "What is power?" Others, notably Socratic seminars, focus around interpreting specific texts. In either case, seminars serve to organize a course's desired learning outcomes-reading, writing, comparing, analyzing, summarizing, and so forth-without undue emphasis on every student's having the same skills. A seminar can easily be followed by work in small groups on specific content areas, or by a writing assignment to develop the ideas under discussion, or by a project that requires other kinds of mastery, like interviewing or data collection.

Sullivan High School tries to follow Mortimer Adler's "threecolumn" teaching philosophy combining the Socratic method for "understanding," small-group or individual coaching for skill development, and presentation-style instruction for gaining information. The approach is reflected even in the school's physical arrangement of classrooms, which often have small adjacent rooms where students can work either unsupervised, with a computer, or with a tutor.

New York's Urban Academy arrived at a similar teaching method, says Ann Cook, after seeing the trouble seniors ran into when they took classes at two local colleges the school has links with. "One of our faculty went along and sat in on the classes to see where the difficulties lay," Cook says. "Very often the kids just needed a clearer articulation of the demands of the course, or some help with structuring their time and study skills." After getting such coaching back at school, Urban's seniors started to do much better; and soon the school incorporated the same technique into its own curriculum. One teacher leads a discussion class; another teacher sits in on that class and then runs a "lab class" to work on some of the issues of process-organizing evidence, categorizing, thinking through arguments.

Another strategy puts kids into demanding courses, then coaches them in the skills they need to do well in them.

"We're putting kids into a demanding academic situation and then helping them to achieve what is expected," Cook says. "The skills of reading, writing, and critical analysis are then supported at the point where they are needed, as a result of the demands of the course."

Even students who come to Urban Academy from academically selective high schools have little experience in inquiry and critical thinking, Cook says—so the heterogeneous ability group all has the same intellectual task to face. The school addresses skill differences by creating courses where the intellectual questions are common to a variety of sources. "We have a course called 'Novels,' for example, where the central question is what makes good writing," she says. "Or we look at Columbus from a historiographical point of view-using primary sources, textbooks, children's books, or just what students already know from growing up in America. We ask. 'Is Columbus who we think he is, and how do we know?" We're not looking for a lower level of intellectual inquiry, but for ways to push everybody to do more. We're looking for equal access to the interesting questions."

Can Everyone Be Gifted?

Equal access lies, in fact, at the heart of the ability-grouping issue. "The school's job is to open the door as wide as possible to every student," says Ted Sizer. In its second year of heterogeneous grouping, Hodgson Vo-Tech High School in Newark, Delaware has all its ninth graders take biology, then lets them choose between two equally demanding science courses (chemistry and principles of technology), depending on their field of interest. "Now that kids know they've all got to do it, they see themselves as capable of more challenging things," says guidance counselor Joann Miro. "We just won nine awards in the statewide Science Olympiad, where two years ago we never even entered it!"

Some schools continue abilitygrouped courses because of pressures from the community, but insist that students be allowed to enroll in any course they are willing to try. At one Coalition member school serving a well-to-do area in a large Southern city, the principal spoke frankly about the results. "We're all trying to do things that eliminate dropouts," he said. "If we can make students feel successful and not give up, that is the point. We allow students to make a choice, but we don't generate the

HORACE'S E-MAIL

I TEACH 9 AND 10 YEAR OLDS in Narragansett, Rhode Island. Been there 17 years, all at the fourth grade. As a member of the Citibank Faculty, I've been listening to a lot of conversation concerning heterogeneous grouping. It's interesting that most high school people think that the "problem" doesn't exist at the elementary level. While it may not be as overt, it is there, and the fact that it is underground makes it more of a problem than most people realize.

Many grammar schools still group by ability levels. If there are three classes at a given grade level, one will consist of the "high" students, one will be average, and one low. The typical "reform" has been to put one group of each level in each classroom. Unfortunately, what happens is that the teachers keep the students within the group for most of their work, especially in reading and math. So for perhaps two-thirds of the day, the students are homogeneously grouped, with little movement within the groups. An answer to this problem is called "whole class / small group" instruction. The students may all read the same books, but are constantly remixed for skill instruction. Our team runs a variation of this where we shuffle all 75 students for skill time. Lots of work, but seems successful on several levels. Simon Hole Narragansett, RI

CORAL SPRINGS MIDDLE School (grades 6, 7, 8) eliminated advanced-average-basic groupings three years ago. Achievement tests have continued to rise, while demographics show a downward trend. A great deal of parent and community preparation preceded elimination of tracking. Teacher delivery systems and strategies are an important component of change. Pat Ciabotti

Broward County, FL

heterogeneous groupings ourselves. It's like diving—I know how high a board I can dive from, and I'm not going up any higher." Critics assail such systems as subtly perpetuating class and racial barriers to achievement. But this principal disagrees; his school encourages students to move up on their own, he says, by using exhibitions and performance assessments so that students afraid they won't do well on conventional testing measures will make bold to try more demanding courses.

Even if the state requires its schools to provide programs for "gifted" children, as in Georgia, those who believe in heterogeneous grouping still find ways to put it in place. Salem High School, a new Coalition public school twenty miles outside Atlanta, uses eighth-grade "teacher ratings" on new ninth graders' records to carefully (and confidentially) balance each of their three ninth-grade teams for mixed ability levels. The school then opens its "honors curriculum" to any student who will contract to meet its standards.

"To qualify, a student has to come up with an open-ended critical question in two subject areas, for each of two consecutive quarters," says Marilyn Fifield, a social studies teacher who helped devise the honors program. "I have a student this quarter who is analyzing why our county grew the way it did over the last 20 years; next quarter she'll do a multimedia presentation projecting growth trends over the next 20 years, interviewing all kinds of city officials." A faculty mentor guides the progress of each project and a three-member panel of teachers assesses it on completion; the work must receive a C or better to appear as an honors grade on the student's transcript. The system allows a tenday grace period after signup, during which students may change their minds.

"We've seen students who were not even labeled as high average taking up the challenge," says Fifield. "And the gifted students, who so often get channeled into narrowly academic areas, get to go beyond the borders of school into the community and university. One student who does lawn service work during the summer proposed a project on setting up a small business; a young cellist is creating a hybrid instrument from the blueprint stage, experimenting with changing its tone. This gets them to see that the ability to go beyond the average can be a practical and satisfying skill." Concerned about whether the students were getting what they needed academically, Fifield says, the committee reviewed the Advanced Placement exams; they found many of the same questions their students had spontaneously chosen to research.

Setting High Standards

The question of standards vexes many who worry that heterogeneous grouping will lower the value of a high-achieving student's education. Conventional testing measures do not support this: aggregate data comparing tracked with untracked students show no significant difference between the two groups in student achievement levels on standardized tests. Once they are tracked, however, low-tracked students do score more poorly than their high-tracked peers. (Some scoff that high achievers do well on standardized tests even if they sleep through school, however.) Advocates of mixed groups argue that authentic assessment actually sets higher standards for all students-measuring not just facts amassed but the ability to reason logically, read and write thoughtfully, and solve problems that have no one right answer.

Opening the honors curriculum to any student who will contract to meet its standards gives scope to different kids' gifts. Setting the same goals for all students creates a school culture where intellectual energy is the rule, not the exception.

Rather than watering down academic standards, Ted Sizer argues, we must raise them, even for the highestachieving students—and that will require a thoughtful rethinking of how and what we teach, and how we measure success.

Even more important, setting the same goals for all students can create a school culture where intellectual energy is the rule rather than the exception. This carries over into classroom behavior as well; one study by Frances Schwartz reveals not only higher academic standards in top tracks but also markedly raised standards for student behavior. Differences like this, observers say, lie behind much of the fear parents have about de-tracking-they're not just looking for high-level academics for their kids, but for a level of commitment to learning, a brief escape from the anti-intellectualism of American schools and society.

"Mixed grouping creates a different playing field," says Philadelphia's Holly Perry. "Youngsters who once behaved as if they didn't have anything to contribute are now feeling a greater permission to participate. And I see less isolation of nerds-we're encouraging ways to demonstrate mastery in ways that everyone recognizes are cool." The difference in student achievement is evident, she says; a visiting regional superintendent could not pick out, from a mixed-ability eighth grade earth science display, the projects that were the work of special education students. Other teachers agree that the climate improves with mixed groups; in her Global Issues course at Boston English, Susan Fleming says, "we have almost no one who is not

performing, or who comes every day but is not with us." Still, she says, because all the school's classes are not heterogeneous, "the kids know who they are---and when they go into their tracked classes they know what level they're expected to perform at."

Assessment practices in a heterogeneously grouped school, ideally, also honor the kind of reflective, nonreductionist thinking that mixed ability groups foster. The Academy for the Middle Years has moved to narrative report cards—it takes teachers 25 hours to write them out while other staff members fill in at their posts, Perry says, but "it makes us value what we say we value."

Still, that shift in standards can also create discomfort for students unused to the new techniques of heterogeneous classes. "We have bright students who go home and say, 'I'm bored,'" says Salem High School principal Robert Cresswell. "They share their parents' and grandparents' mindset-that learning consists of a lot of memorizing, right-answer tests, worksheet homework." The highest-achieving students also resist losing their accustomed, often automatic, privilege and prestige; tracking protects their place in a system that's worked just fine for them so far.

What It Takes to Work

A sustained effort to educate parents seems critical to a school's success with a heterogeneous grouping policy. "We sit worried parents down with our teaching teams and talk about how emphasizing concepts, communication, and collaboration prepares their kids better than the old regurgitation of facts," Cresswell says. "And we've started mailing home a monthly newsletter describing just what is going on in their kids' classes, and what they should expect their child to be learning and studying." At McCaskey High School, opposition from parents of higher-level students sparked a series of community

meetings and district-sponsored discussion programs, says principal John Syphard. Representatives from Brown and other universities participated, written information was sent out to parents, and many parents came to observe classes in the Essential Studies program. "Part of the problem," Syphard observes, "was that people wrongly assume our Essential Studies program is just the same as the cooperative learning movement, which a lot of people have trouble with for whatever reasons. Once they see more of what we really do, they feel more comfortable with it."

High-track students often resist losing their accustomed, often automatic, privilege and prestige.

Equally important if heterogeneous grouping is to succeed, advocates agree, are vigorous efforts to develop challenging mixed-ability curricula and to give teachers the time and opportunity for professional development in the new ways. "We have two hours a day to work with other teachers," says McCaskey teacher Jo Stokes. "We also have a district professional education center where we can go and debrief, and a lot of backing from our department chairpeople. Any time we introduce a new teaching strategy, we use a lot of peer coaching." Other observers suggest lowering class sizes for a time at the start of mixed grouping and suspending conventional teacher evaluations until faculty members become more comfortable with the new methods.

"It's a training issue," agrees Boston English's Susan Fleming. "Most of our teachers don't feel willing to do heterogeneous grouping schoolwide; they'll do it in history and science but not in math and English. People think there's some linear sequence that drives what the high-achieving kid needs when he goes to college, that if you don't teach in this sequence you take away his ability to make it. To get teachers to identify what's *fundamental* for students, and to integrate those things into our curriculum at every level, would take a tremendous amount of training and commitment."

Involving outsiders in the school's efforts-from universities to business partnerships and parent volunteersseems to energize programs where students are expected to meet universal goals. And substantial encouragement is needed from the admissions offices of colleges and universities, whose shadow looms large over the decisions made by most high schools. "We're under terrific pressure to classify and catalog students so they'll know what they're getting," said one principal. "They know from looking at our transcript that any course number with 9 in it is in an advanced placement track. Otherwise what does a 3.9 grade point average mean?"

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Rather than watering down academic standards we must raise them, even for the highest-achieving students, Sizer says.

As new research in cognitive science, such as that of Harvard's Howard Gardner and Dennie Wolf. redefines "intelligence" to embrace a much broader range of attributes, a profound shift in our attitudes about schooling must inevitably follow. Schools that change to reflect this shift, as these Essential schools are trying to do, will not be places where the lowest common denominator of scholarly challenge prevails, as critics of heterogeneous grouping fear. Instead, they could embrace far more rigorous demands, at the same time allowing more variation in how those demands are met.

"If we really have faith that all students have intellectual power," Joe McDonald observes, "a tremendous array of different routes opens up to let them exercise it. Whether a kid does an internship in a local business or takes an advanced calculus class in an 'early college' setting, neither one will carry a stigma. We can balance seminarstyle and project-based work with sequential, stepwise material where it is appropriate to the subject matter. If you expect that all students will meet high intellectual standards, there's room for a tremendous amount of responsible differentiation in the American high school."

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